

NBM v4.1 SBN Product Additions and Removals

Products that will be added to the SBN with this implementation include:

- 1) Percentiles of Maximum and Minimum Daily Temperature (5th, 10th, 25th, 50th, 75th, 90th, 95th) (AK).
- 2) Probabilities of Maximum Daily Temperature being less than -20F, 0F, 32F and being greater than 70F, and 90F (AK)
- 3) Probabilities of Minimum Daily Temperature being less -60F, -20F, 0F, and 32F (AK)
- 4) Percentiles of 24-h Maximum Wind Speed (5th, 10th, 25th, 50th, 75th, 90th, 95th) (CONUS).
- 5) Probability of 24-h Maximum Wind Speed exceeding 11-, 17-, 22-, 34-, 48-, and 64 knots (CONUS).
- 6) Percentiles of 24-h Maximum Wind Gust (5th, 10th, 25th, 50th, 75th, 90th, 95th) (CONUS).
- 7) Probability of 24-h Maximum Wind Gust exceeding 22-, 34-, 48-, 56-, and 64 knots (CONUS).
- 8) Percentiles of 48-h and 72-h Quantitative Precipitation forecasts (10th, 50th, 90th) (CONUS, PR, OC).
- 9) Percentiles of 1-h Snow Accumulation forecasts (5th, 10th, 25th, 50th, 75th, 90th, 95th) (CONUS, AK).
- 10) 24-h, 48-h, and 72-h Deterministic Snow Accumulation (CONUS, AK)
- 11) Standard Deviation of Wave Heights (CONUS, AK, HI, PR, GU).
- 12) SPC's post-processed 4-h and 24-h Probabilities of Tornadoes, Hail, and Wind (CONUS).
- 13) New Global Domain with Temperature, Height, Wind Direction, Wind Speed, and Relative Humidity at 925-, 850-, 700-, 500-, and 250 millibars.

Products that will be removed from the SBN with this implementation include:

- 1) Probability of Refreezing Sleet, Probability of Ice Present, and Maximum Wet Bulb Temperature Aloft (CONUS, AK).
- 2) Maximum and Minimum Temperature Standard Deviation (CONUS)
- 3) Probability of Minimum Nighttime Temperature being less than -40F (CONUS)
- 4) Precip Duration (CONUS, AK, HI, PR)
- 5) 12-h Probability of Precipitation (AK, HI, GU)

Products that are currently being sent, but will have a increase in the total number of grids sent over the SBN with this implementation include:

- 1) 2-m Temperature extended to 191 hours (01z, 13z - CONUS, PR), or 119 hours (01z, 13z - AK, HI), or 36 hours (10z, 22z - CONUS, AK, HI, PR, GU)
- 2) 2-m Dewpoint extended to 191 hours (01z, 13z - CONUS, PR) or 36 hours (10z, 22z - CONUS, AK, HI, PR, GU)
- 3) 10-m Wind Direction extended to 191 hours (01z, 13z - CONUS, PR, GU), or 119 hours (01z, 13z - AK, HI), or 36 hours (10z, 22z - AK, GU, HI, PR)
- 4) 10-m Wind Speed extended to 191 hours (01z, 13z - CONUS, PR), or 119 hours (01z, 13z - AK, HI), or 36 hours (10z, 22z - CONUS, AK, HI, PR, GU)
- 5) 10-m Wind Gust extended to 191 hours (01z, 13z - CONUS, PR), or 119 hours (01z, 13z - AK, HI), or 36 hours (10z, 22z - CONUS, AK, HI, PR, GU)
- 6) 1-h Quantitative Precipitation forecasts extended to 60 hours (01z, 13z - CONUS)
- 7) 6-h Snow Amount extended to 51 hours (03z, 15z - CONUS, AK) or 49 hours (17z - CONUS) or 50 hours (22z - CONUS, AK)
- 8) 24-h Snow Amount Percentiles extended to 215 hours (01z, 13z - CONUS) or 221 hours (07z, 19z - AK)
- 9) 48-h Snow Amount Percentiles extended to 251 hours (01z, 13z - CONUS, AK) or 245 hours (07z, 19z - AK) or 101 hours (07z - CONUS)
- 10) 72-h Snow Amount Percentiles extended to 251 hours (01z, 13z - CONUS, AK) or 245 hours (07z, 19z - AK)
- 11) Snow Liquid Ratio extended to 191 hours (01z, 13z - CONUS) or 119 hours (01z, 13z - AK)
- 12) Snow Level extended to 191 hours (01z, 13z - CONUS) or 119 hours (01z, 13z - AK, HI)
- 13) 24-h Ice Amount Percentiles extended to 155 (01z, 13z - CONUS, AK) or 149 (19z - AK) or 137 (19z - CONUS)
- 14) 48-h and 72-h Ice Amount Percentiles extended to 245 or 251 hours (01z, 07z, 13z, 19z - CONUS, AK)
- 15) 24-h Ice Amount extended to 215 hours (01z, 13z - CONUS) or 143 hours (01z, 13z - AK) or 221 hours (19z - AK) or 137 hours (19z - CONUS)
- 16) Probabilities of freezing rain, rain, sleet and snow extended (01z, 13z) to 191 hours (CONUS), or 119 hours (AK)
- 17) Ceiling Height extended to 45 hours (03z, 15z - GU) or 48 hours (06z, 21z - GU) or 84 hours (03z, 09z, 15z, 21z - AK)
- 18) Sky Cover extended to 119 hours (01z, 13z - AK, HI) or 191 hours (01z, 13z - CONUS, PR) or 36 hours (10z, 22z - AK, HI, PR, GU)

- 19) Maximum Reflectivity extended to 36 hours (01z - GU; 03z, 15z - HI, GU; 07z, 09z, 19z, 21z - PR)

Products that are currently being sent, but will have a reduction in the total number of grids sent over the SBN with this implementation include:

- 1) 2-m Temperature Percentiles reduced to 192 hours (00z, 07z, 12z, 19z - Oceanic)
- 2) 2-m Temperature reduced to 18 hours (00z, 12z - CONUS, AK, HI, PR) or 191 hours (01z, 13z - GU) or 113 hours (07z, 19z - PR) or 191 hours (07z - AK, HI) or 185 hours (07z, 19z - CONUS)
- 3) 2-m Temperature Standard Deviation reduced to 191 hours (01z, 13z - CONUS)
- 4) Maximum Daytime Temperature Percentiles and Probabilities reduced to 192 hours (06z) or 204 hours (18z) (CONUS)
- 5) Maximum Daytime Temperature reduced to 203 hours (01z - GU) or 125 hours (07z - GU) or 191 hours (13z - GU) or 113 hours (19z - GU) or 197 hours (19z - CONUS, AK, HI)
- 6) Minimum Nighttime Temperature Percentiles and Probabilities reduced to 204 hours (06z) or 192 hours (18z) (CONUS)
- 7) Minimum Nighttime Temperature reduced to or 191 hours (01z - GU) 113 hours (07z - GU) or 203 hours (13z - GU) or 125 hours (19z - GU) or 185 hours (19z - CONUS, AK, HI)
- 8) 2-m Dewpoint reduced to 18 hours (00z, 12z - CONUS, AK, HI, PR) or 191 hours (01z, 13z - GU) or 185 hours (07z - CONUS) or 113 hours (07z - PR; 19z - HI, PR) or 185 hours (19z - CONUS)
- 9) 2-m Dewpoint Standard Deviation reduced to 191 hours (01z, 13z - CONUS)
- 10) Maximum Relative Humidity reduced to 120 hours (00z - GU) or 137 hours (01z - AK, HI; 07z GU) or 132 hours (12z - GU) or 209 hours (01z - CONUS, PR) or 125 hours (13z - AK, HI; 19z - GU) or 197 hours (13z - CONUS, PR) or 191 hours (19z - CONUS, AK, HI)
- 11) Minimum Relative Humidity reduced to 132 hours (00z - GU) or 120 hours (12z - GU) or 125 hours (01z - AK, HI; 07z - GU) or 173 hours (01z - CONUS, PR) or 137 hours (13z - AK, HI; 19z - GU) or 185 hours (13z - CONUS, PR) or 203 hours (19z - CONUS, AK, HI)
- 12) 10-m Wind Direction 50th and 90th Percentiles reduced to 192 hours (00z, 07z, 12z, 19z - Oceanic)
- 13) 10-m Wind Direction reduced to 18 hours (00z, 12z - CONUS, AK, HI, PR) or 192 (00z, 12z - Oceanic) or 191 hours (01z - GU; 07z - AK, HI; 07z, 19z - Oceanic) or 113 hours

- (07z - PR, GU; 19z - HI, PR, GU) or 185 hours (07z, 19z - CONUS)
- 14) 10-m Wind Speed 50th and 90th Percentiles reduced to 192 hours (Oceanic)
 - 15) 10-m Wind Speed reduced to 191 hours (01z, 13z - GU; 00z, 07z, 12z, 19z - Oceanic) or 113 hours (07z - PR, GU; 19z - HI, PR, GU) or 18 hours (00z, 12z - CONUS, AK, HI, PR) or 185 hours (07z, 19z - CONUS)
 - 16) 10-m Wind Speed Standard Deviation reduced to 191 hours (01z, 13z - CONUS)
 - 17) 10-m Wind Gust 50th Percentile reduced to 192 hours (Oceanic)
 - 18) 10-m Wind Gust reduced to 18 hours (00z, 12z - CONUS, AK, HI, PR) or 191 hours (01z, 13z - GU) or 185 hours (07z, 19z - CONUS) or 113 hours (07z - PR; 19z - HI, PR)
 - 19) 10-m Wind Gust Standard Deviation reduced to 191 hours (01z, 13z - CONUS)
 - 20) Mean Sea Level Pressure Percentiles reduced to 191 hours (Oceanic)
 - 21) 6-h Probability of Precipitation reduced to 125 hours (01z, 13z - AK) or 197 hours (01z, 13z - CONUS, PR; 07z, 19z - AK) or 119 hours (07z, 19z - PR) or 191 hours (07z, 19z - CONUS)
 - 22) 6-h Precipitation Amount Percentiles reduced to 120 hours (00z, 12z - CONUS; 06z, 18z - AK) or 198 hours (00z, 12z - AK, Oceanic) or 192 hours (06z, 18z - CONUS, Oceanic)
 - 23) 6-h Precipitation Amount reduced to 125 hours (01z, 13z - AK) or 197 hours (01z, 13z - CONUS, PR, GU; 07z, 19z - AK) or 191 hours (07z, 19z - CONUS) or 119 hours (07z, 19z - PR, GU)
 - 24) 12-h Probability of Precipitation reduced to 203 hours (01z - CONUS, PR) or 125 hours (07z, 19z - PR) or 197 hours (07z - CONUS)
 - 25) 24-h Precipitation Amount Percentiles reduced (00z, 12z) to 132 hours (CONUS) or 204 hours (AK, Oceanic) and reduced (06z, 18z) to 138 hours (AK) or 210 hours (CONUS, PR, Oceanic)
 - 26) 6-h Snow Amount reduced to 125 hours (01z, 13z - AK) or 50 hours (04z, 16z - CONUS, AK) or 49 hours (05z - CONUS, AK) or 197 hours (07z - AK; 01z, 13z - CONUS; 19z - AK) or 191 hours (07z, 19z - CONUS)
 - 27) 6-h Snow Amount no longer sent at 00z, 12z
 - 28) 24-h Snow Amount Percentiles reduced to 143 hours (01z, 13z - AK) or 137 hours (07z, 19z - CONUS)
 - 29) 24-h Snow Amount Probabilities reduced to 137 hours (07z, 19z - CONUS)

- 30) 24-h, 48-h, and 72-h Snow Amount Percentiles and Probabilities no longer sent at 00z, 04z, 05z, 12z, 16z, or 17z (CONUS, AK)
- 31) Snow Liquid Ratio reduced to 18 hours (00z, 12z - CONUS, AK; 07z - AK) or 50 hours (04z, 16z - CONUS) or 113 hours (07z - CONUS) or 185 hours (19z - CONUS)
- 32) Snow Level reduced to 18 hours (00z, 12z - CONUS, AK, HI) or 50 hours (04z, 16z - CONUS) or 191 hours (07z, 19z - AK, HI) or 113 hours (19z - HI) or 185 hours (07z, 19z - CONUS)
- 33) 6-h Ice Amount no longer sent at 00z, 10z, 12z, or 22z (CONUS, AK)
- 34) 24-h, 48-h, and 72-h Ice Amount Percentiles no longer sent at 00z, 04z, 12z, or 16z (CONUS, AK)
- 35) Probabilities of freezing rain, rain, sleet and snow reduced to 18 hours (00z, 12z - CONUS, AK) or 50 hours (04z, 16z - CONUS), or 113 hours (07z - CONUS) or 185 hours (19z - CONUS)
- 36) Deterministic Ceiling Height reduced at 03z, 09z, 15z, and 21z to being sent only between 26-36 hours (CONUS)
- 37) Sky Cover reduced to 18 hours (00z, 12z - CONUS, AK, HI, PR) or 191 hours (01z, 13z - GU) or 185 hours (07z - CONUS) or 113 hours (07z - PR; 19z - HI, PR) or 185 hours (19z - CONUS)
- 38) Sky Cover Standard Deviation reduced to 191 hours (01z, 13z - CONUS)
- 39) 6-h and 12-h Probability of Thunderstorm reduced to 126/132 hours (00z, 12z - AK) or 119/125 hours (07z, 19z - CONUS, AK, HI, PR, Oceanic)
- 40) Maximum Reflectivity reduced to 35 hours (01z - HI, GU)
- 41) Maximum Haines Index reduced to 119 hours (07z, 19z - CONUS, PR) or 197 hours (07z, 19z - AK, HI)
- 42) Mixing Height reduced to 113 hours (07z - CONUS, AK, HI, PR; 19z - CONUS, PR) or 191 hours (19z - AK, HI)
- 43) Transport Wind Direction and Speed reduced to 113 hours (07z, 19z - CONUS, AK, HI, PR) or 191 hours (19z - AK, HI)
- 44) Freezing Spray reduced to 113 hours (07z, 19z - CONUS, AK, Oceanic) and no longer being sent at 00z and 12z.